

REMARKS

Claims 1 to 22 are pending. New Claims 20-22 have been added. A restriction requirement has been made in respect of former Claims 1-19 pursuant to 35 U.S.C. §121. For the reasons outlined below, these rejections are respectfully traversed and reconsideration and withdrawal are respectfully requested.

Election/Restriction

The Examiner has requested restriction to one of Groups I-IV as set forth in the Office Action. In response, applicants elect the claims of Group I (Claims 1-14) with traverse.

The Examiner has commented that the claims of Groups II, III and IV are allegedly directed to separate inventions, and, as a result, has further alleged that the claims of Group I relate to a separate invention in that the products of Group I may be utilized in the methods claimed in any of Groups II, III and IV. Applicants respectfully disagree, and respectfully submit the following.

The invention relates to compounds capable of modulating NTPDase activity and their uses. The modulation of such activity in turn leads to a modulation of the levels of the substrates/products of NTPDases, including nucleotides and nucleosides, and metabolites and derivatives thereof. This in turn allows a modulation of the activity of a biological process which is affected by the level of such substrates/products. Therefore, Claims 15 and 16 are directly related to the compounds of Claims 1 to 14, in that they are directed to methods for the modulation of an NTPDase, which is the direct manifestation of a compound of the invention. The methods of Claims 17 to 19 relate to subsequent downstream events which result from the modulation of NTPDase activity. Therefore, applicants respectfully submit that the methods claimed in Claims 15 to 19 (i.e. Groups II, III, and IV) are related, in that they define a chain of events stemming from exposing an NTPDase to a compound of Group I of the invention. The compounds of Group I directly obtain only the process of Group II. The direct consequence of Group II modulation of NTPDase activity is the Group III modulation of the level of nucleo(s)(t)ides, and the direct consequence of that is the Group IV induction of biological activity. That the group IV process occurs as a result of the Group III process which itself occurs as a result of the Group II process is apparent from new Claims 20 and 21.

Further to the above, new Claims 20-22 have been added, which relate to the methods of the invention, and are supported by for example claims 17 to 19.

In light of the above, applicants respectfully request reconsideration and that the requirement for restriction be withdrawn.

The Examiner has requested an election of species. In response, applicants elect with traverse, "thioether" as the "substituent" and "alkyl group" as group "X".

Applicants first respectfully refer to 37 C.F.R. 1.146, a portion of which is reproduced below:

37 C.F.R. 1.146. Election of Species

"In the first action on an application..." (emphasis added)

As the election of species requirement has been asserted for the first time in the action dated December 19, 2001, applicants do not believe that such a request is proper at this time during prosecution, as this is the second office action to issue in this case (the first office action having issued on July 23, 2001).

Regarding the term "X," applicants respectfully submit that all of the groups listed as (a)-(d) by the Examiner are alkyl groups, and thus fall within the scope of the term "alkyl," i.e. denoted as species (d) by the Examiner. Regarding the "substituent," applicants note that all fall within the generic definition of "other than H" as recited in Claim 1.

In light of the above, applicants respectfully request reconsideration and that the requirement for an election of species be withdrawn.

It is believed this responds to all of the Examiner's concerns, however if the Examiner has any further questions, he is invited to contact Joy Morrow at 613-232-2486.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,



Nicholas J. Seay

Reg. No. 27,386

Attorney for Applicant

QUARLES & BRADY LLP

P O Box 2113

Madison, WI 53701-2113

TEL 608/251-5000
FAX 608/251-9166

QBMAD\329668.1